

Amendments to the Specification

Please amend the paragraphs that begin at page 9, line 4 as follows:

In other mixer embodiments, gain linearity can be further enhanced with different G_m cell configurations. For example, the differential pairs 84 of FIG. 3 can be replaced with the G_m cell 120 ~~110~~ of FIG. 4 which is formed with a differential pair 122 ~~112~~ of transistors in which degeneration resistors 123 ~~113~~ are inserted before each emitter to enhance linearity.

In another example, the differential pairs 84 can be replaced with the G_m cell 130 ~~120~~ of FIG. 4 which is formed with two differential pairs 132 ~~122~~ and 133 ~~123~~ that are cross coupled. In a configuration generally known as a multi-tanh doublet, each differential pair is formed with different emitter areas e and Ae wherein A is a number greater than one (e.g., 4) and is arranged so that transistors with areas e and Ae respond to the same side of a differential drive signal. Other multi-tanh arrangements can also be used, e.g., a multi-tanh triplet.